

Naturalist Notebook

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NATURALIST NOTEBOOK

SEPTEMBER 1969

VOLUME V

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Photo by R. Dewire

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September

The Month Of The Monarch Butterfly Migration



September is the month of the monarch butterfly migration. This handsome black and orange butterfly breeds in southeastern Canada and northern United States. You have all probably seen this insect during the summer. Some of you may have seen the black, yellow, and white striped caterpillar stage on milkweed plants or perhaps the brilliant green chrysalis hanging under a rock or a wall.

You may also have noticed that these butterflies become much more numerous during September. This is because the monarch is beginning to fly South for the winter - migrating just as many of our birds do. In flocks or alone they can be found most commonly along our shoreline heading South to the Gulf Coast in Florida, Texas and Mexico. In spring the survivors will make their way back North, lay their eggs, and the cycle will begin again.

On a cool, early September morning, their bodies cold and wings damp from morning dew, these butterflies hang from bushes and flowers often in clusters of a dozen or more. In choice areas around here such as Harkness Memorial Park, Napatree Point, and Block Island the monarchs may number a hundred or more.



Monarch Cluster at Block Island—1968

People who study this insect have a program of tagging similar to bird banding. A white $\frac{1}{2}$ " by $\frac{1}{4}$ " self-adhesive sticker is folded over the front edge of the monarch's wing and pressed together, sticking to both sides of the wing. In the immediate area where the tag goes, the scales on the butterfly's wing are rubbed off so the tag will stick firmly. Each tag is numbered and has an address to send it to should one be found. Migration routes and distances traveled are among the information sought by the taggers.

If you catch a monarch this fall, be sure and look to see if it has a tag on it.

SEPTEMBER'S CALENDAR

September is the month of cool mornings and first fall colors.

Sept. 1 ... Egrets arrive here in flocks - flying North after nesting.

Sept. 4 ... Blackpoll Warblers - our most common fall migrant warbler - begin to move through as they head South.

Sept. 7 ... Tree Swallows flock in great numbers lining telephone wires and covering bushes.

Sept. 10 ... Goldenrods draw many species of insects which feed on their flowers.

Sept. 15 ... The Golden Plover - arriving from the Arctic Circle and heading for Argentina - stops off on his long trip.

Sept. 17 ... Woodchucks are fattening themselves for winter.

Sept. 19 ... The Yellow-bellied Sapsucker passes through the area on his way South.

Sept. 22 ... White-throated Sparrows and Slate-colored Juncos arrive for the winter ahead.

Sept. 23 ... Fall begins at 12:07 A.M.

Sept. 24 ... Large Golden Garden Spiders spin their webs in fields to catch the many insects present.

Sept. 25 ... Full Harvest Moon.

Sept. 29 ... Baldpates and Red-breasted Mergansers are two of our first winter ducks to arrive along the coast.

Sept. 30 ... Cool weather reduces the number of frogs along pond edges. Soon all will be hibernating.



FOOTNOTES TO NATURE

by MARY JEAN DEWIRE

This new column will appear regularly beginning with this September issue. In it, I plan to tell you many interesting but less well-known facts about Mother Nature's plants and animals. Some of them you may already know, but I hope most of my stories will be new to you and will help you to better observe the things around you.

This month I would like to tell you about Queen Anne's Lace. You have all probably seen this pretty weed growing in fields or along roadsides, but I am wondering how many of you have actually seen Queen Anne herself.

Photo by J. Walker



When you first see Queen Anne you will probably think she is just a small insect. If you look carefully, however, you will see a deep purplish-red flower in the middle of all the white. This is Queen Anne who sits surrounded by her "lace". She usually sits in the center of the plant but is occasionally found on the side. Sometimes she is covered by the white "lace" and it is necessary to spread this apart in order to see her.



Photo by J. Walker

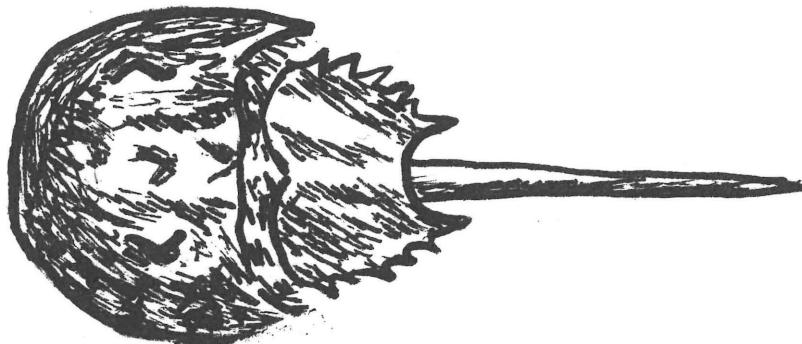
Some people have another name for this plant - they call it the Wild Carrot. If you look closely you will see that its leaves are similar to those of the carrots that you eat and it also has a single large taproot. Although it is in the same family as the edible carrots, the Wild Carrot cannot be eaten.

Queen Anne's Lace is most commonly seen in our area during late summer and fall. The next time you see this plant why don't you try to find Queen Anne. She is always there!

ALONG THE SHORE

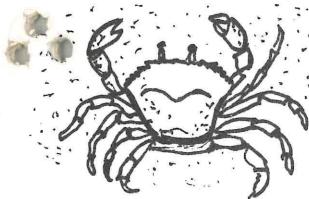
by BARBARA KASHANSKI

Did you know that you have probably seen a living fossil? If you have ever found a horseshoe or king crab then you have. This unusual creature really isn't a crab at all, but an ancient relative of the spider. The horseshoe crab represents a group of animals that existed over half a billion years ago. This is long, long before mammals and man appeared and is even way before the age of dinosaurs. Our Atlantic species of king crab, *Limulus polyphemus*, has not changed his looks either for about 150 million years!



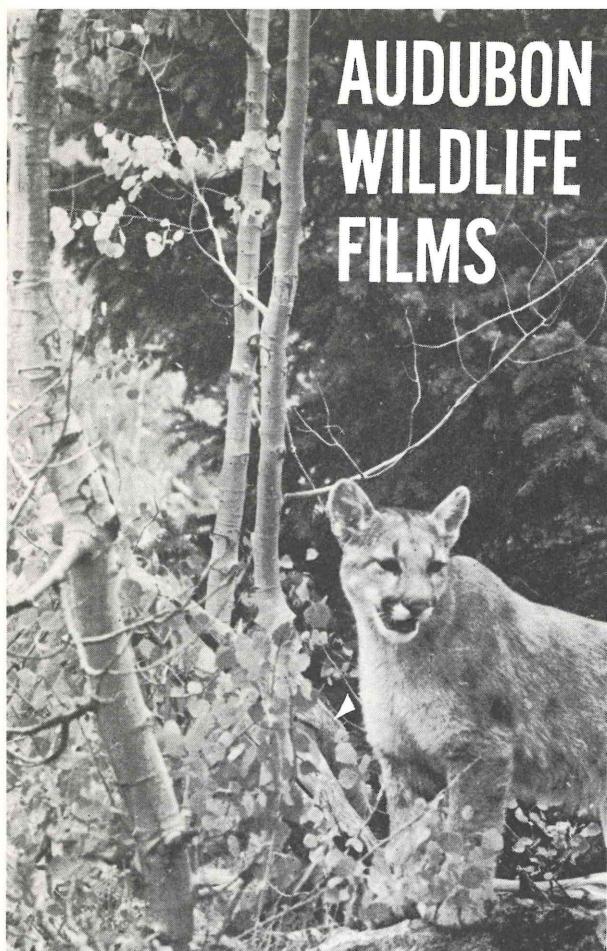
Did you know the horseshoe crab has a built in clock? Scientists call it a biological clock which tells the horseshoe crab when it is just the right time to lay their eggs. The biological clock goes off when the moon and the tides are just right for the female to come ashore and dig a shallow nest in the moist sand and lay several thousands of eggs. Waves carry the sperm from the smaller male to the eggs for fertilization. This happens in the spring at night during May and June when the new moon appears and especially during the

full moon when tides are very high.



If the eggs are not discovered by hungry crabs, crows, and shorebirds, the eggs that have been warmed by the sun hatch in two weeks. Egg laying is carefully timed so that there is usually a flooding tide at the end of the two weeks which uncovers the nest, and the churning waves of sand cut open the egg membrane and lets the little larva horseshoe crab free. The young look like their parents but do not have the tail or telson. Moving out to deep water the little horseshoe crab molts and grows, molts and grows for 9 or 10 years before its biological clock gives the signal that it is time to return to the beach to take part in reproducing more of this living fossil.

Although many sea and shoreline creatures have built into their systems "clocks" that follow the changes of the tide, I think the horseshoe crab is our best, most interesting, and clearest example of nature's perfect timing which will, without man's interference, make sure that the fascinating horseshoe crab is around for another 150 million years.



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THIRD SEASON

1969-70 Program

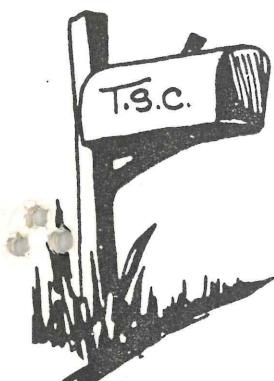
Sunday, October 26, 1969
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For further information,
Contact the Science Center.

ARTICLES OF ADULT INTEREST



We welcome notice of Conservation activities or problems for inclusion in this section of the Naturalist's Notebook. Please let us know of your local activity so that others may be aware of your efforts and lend their support where possible.



DDT: The above is a reproduction of a bumper sticker in the July issue of the National Audubon Society's magazine Audubon. Bright red with white letters, it came with the following message:

"It should be promptly detached and displayed prominently on your car, a window, a utility post (cover ^{up} old campaign signs). Or, under dark of night, sneak out and stick it on your friendly neighborhood spray truck. Michigan Conservationist Stephen M. Stackpole provided the 100, 000 bumper stickers to insert in each copy of Audubon. A 14" version is available in quantities of 25 for \$5.00 from the Kalamazoo Nature Center, 7000 North Westnedge Ave., Kalamazoo, Michigan, 49001. To arms!"

MORE ON DDT: The Connecticut Conservation Association has put out an excellent pamphlet on DDT entitled "DDT-Declining Deadly Toxin". It brings one up to date on the status of the chemical and what must be done to have its use stopped. Copies of this may be obtained at the Center. It is a subject every adult should be interested in.

WATER POLLUTION: Although the Clean Water Restoration Act of 1966 authorizes one billion dollars for sewage treatment facility construction grants-in aid for fiscal 1970, President Nixon left unaltered former President Johnson's fiscal 1970 budget request for 214 million dollars. This sum is inadequate to accelerate water clean-up. In Connecticut, this cut has resulted in the state not getting some 37 million dollars it should receive as the Federal Government's share toward constructing local treatment facilities. If this promised money is not repaid, the state clean water program will have to be curtailed. Every interested citizen should write his Representative and Senator and the President. The message is simple . . . a much bigger share of our tax money spent to clean up the water. We hope members of the Science Center will join in this demand. We have a right to clear sparkling water instead of the discolored murky water we see so much of wherever we travel. Three important people to write to are as follows: (1) The President, The White House, Washington, D. C. 20500; (2) The Hon. Michael J. Kirwan, Chairman, Subcommittee on Public Works, House Appropriations Committee, House of Representative, Washington, D. C. 20515/ (3) Senator Allen J. Ellender. Chairman, Subcommittee on Public Works, Senate Appropriations Committee, U.S. Senate, Washington, D. C. 20510.

OSPREY REPORT

1969 NESTING SEASON

by BOB DEWIRE

With the nesting season at an end, we can look back on the status of the most endangered species to nest in our state - the Osprey.

Mr. Paul Spitzer resumed his doctorate studies on the status of the Osprey in Connecticut and neighboring areas. The following results were presented to us by him for which we are indebted.

Eggs were transferred from most of the Connecticut nests to Maryland and replaced by the Maryland eggs. If eggs failed to hatch in a Connecticut nest, then some young birds were brought up from Maryland to replace the eggs.

The number of young fledged from Connecticut nests are shown in the following table. An asterisk (*) indicates the birds were originally eggs or young from Maryland:

<u>Nest Location</u>	<u>#Nests</u>	<u>#Young</u>
Barn Island, Stonington	3	0
Stonington Airport	1	0
Wilcox Curve, Stonington	1	3
Mason's Island	1	2*
Trumbull Airport	1	2*
Millstone Point	1	2
Black Point	3	6*+
Griswold Property, Lyme	1	2*
Great Island, Lyme	<u>4</u>	<u>12*</u>
	<u>16</u>	<u>29</u>

*+ All but one young bird were from Maryland.

Photo by R. DEWIRE



Adult female Osprey from
Mason's Is. trapped and banded
in June.

Of the Connecticut eggs that were taken to Maryland, one of two Mason's Is. eggs hatched, two of four Trumbull Airport eggs hatched, none of the six Black Point eggs hatched and two eggs from the Lyme area hatched. If we total up the success of Conn. eggs alone, we find that out of 16 nests in Conn. this summer, 11 young were produced. This is slightly better than last year and may or may not be a hopeful sign.

Twenty-five of the adult birds at these nests were trapped and color banded this summer. All of the young birds except those in the Millstone Pt. and Wilcox Curve nests and one bird at Trumbull Airport were also color banded.

Nests in neighboring areas produced the following results:

- (1) Fisher's Island had 5 nests of which two produced 4 young.
- (2) Gardiner's Island had 39 nests where a projected total of 31 young hatched.
- (3) The colony on the Westport River in Mass. had 17 nests of which 8 produced 12 young.

Mr. Spitzer will continue this most interesting and important work next year. The Science Center praises his project and hopes its results will contribute to saving this bird.

CONNECTICUT CREATURES

by MIKE WALKER

A few weeks ago we were contacted by an exterminating company that had been called to a lady's house in Groton. The woman had discovered a large rat in the dresser drawer. When the exterminator arrived he found that the "rat" was a young opossum probably less than three months old. He removed the animal alive, the Science Center was called, and the little opossum was brought to us in a box a few hours later.

From the tip of the Florida Keys to the Texas Gulf Coast to a dresser drawer in Groton, the unlovely possum is today one of Natures most successful animals. There are more of these strange mammals in North America at the present time then when the Algonquin Indians named the animal "opossum" hundreds of years ago.

Intelligence doesn't explain this success story. A full grown possum, weighing up to 12 pounds and measuring nearly three feet in length, counting a long naked tail, has a tiny brain about one-sixth the size of a raccoon's. The animal's main defense seems to consist of falling over on its side and "playing possum" when hard pressed by its enemies. Experts can't agree on whether the possum really faints or whether it is staging a conscious act. In any event the performance often works, and I have seen many given a shake or two by a dog that becomes disinterested when the animal fails to respond.

The possum begins life as a tiny creature, born

after only a thirteen day gestation period. A dozen new-born possums would fit easily into the bowl of a teaspoon. The babies are immediately transferred to the female opossum's pouch, where they remain and undergo further development for about 6 weeks. Twelve or thirteen babies may survive this period, and the adult female may have up to three litters a year.

From the time they start out on their own, possums forage mainly at night and they will feed on just about anything edible, which at least partially explains their success. The possums long jaws hold some 50 teeth, more than any other North American land mammal, and it uses them to chop up everything from crabs to hickory nuts.

In a day when man is steadily eliminating many of his fellow creatures, the ungainly opossum is a model of survivability. As we released our in the woods the other day he kind of swaggered as he ambled off.



Photo by J. WALKER

FIELD NOTES

JULY 15 - AUGUST 15

Lyme and Saybrook: Two SNOW GEESE were reported from Saybrook on July 19th. Way out of their normal range, it must be assumed that these are old birds which did not make the northward flight this year. The Blackhall River in Lyme is one of the best local areas to see the secretive YELLOW-CROWNED NIGHT HERON. They move out onto the mudflats at low tide. Up to three birds have been seen there during this period. Children at the Science Center's Summer Program were able to find 3 WORM SNAKES - a rarely seen reptile in the Joshua Rocks area.

Waterford and New London: THISTLES flowered on August 5th at Mary Butler Dr. in Waterford, KATYDIDS were first seen on July 29th, coming to a screen at night drawn by lights on Oil Mill Road. Shorebird migrants included 22 SANDERLINGS at Harkness Park on July 31st and 2 BLACK-BELLIED PLOVERS, 4 RUDDY TURNSTONES and 8 DOWITCHERS there on August 6th. Five WOOD DUCK are in Lake Brandigee in Waterford. Two of our winter residents normally far north of here in summer were reported in the area. One was a RED-BREASTED MERGANSER at Magonk Point and the other a HORNED GREBE at the Strand, both on July 18th.

Mystic and Stonington: MEADOW BEAUTY and TURKSCAP LILY were both in flower at Barn Island on July 26th. SWAMP ROSE MALLOW flowered there on August 8th. CARDINAL FLOWER bloomed at Bindloss Road on August 5th. A SNOWY EGRET was on a mudflat on the Mystic River at the Peace Sanctuary on August 5th, and the CANVASBACK is still present further up the river. At Barn Island, 14 seemed to be the lucky number as 14 CANADA GEESE, 14

GREAT BLUE HERONS, and 14 COMMON EGRETS were all present on August 2nd. Eight GREEN-WINGED TEAL were there on July 26th alone with a male RED-BREASTED MERGANSER. A rare LOUISIANA HERON was at Barn Island on August 5th and two PIED-BILLED GREBES were there on August 11th.

Rhode Island Shoreline: Quonochontaug was the most productive shorebird area during this period. 75 DOWITCHERS, a WHIMBREL, and a WILSON'S PHALAROPE were all there the weeked of July 19 & 20th and 4 WILLETS and 35 STILT SANDPIPERs were there the weekend of Aug. 9th and 10th. Other unusual birds reported from Quonochontaug were an adult LITTLE BLUE HERON on July 26th, a CATTLE EGRET on Aug. 8th and 2 ROYAL TERNS on the 10th. The most exciting find of the period, however, was of a MARBLED GODWIT, a very large shorebird that is quite rare in the East. The bird was at Jerusalem from August 6th to the 10th and on the 10th was joined by a WHIMBREL.

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ACTIVITIES FOR SEPTEMBER

September 10 - 6:15 P.M. Barn Island. An evening field trip to the marsh. Meet at the State Boat Landing.

September 13 - 8:00 A.M. Napatree Point. A 3 mile walk down the beach to observe migrating shorebirds. Meet at the Watch Hill parking area.

September 17 - 6:15 P.M. Harkness Memorial Park. Beautiful fall flowers in the gardens, shorebirds in the inlet, and beach-combing make this a trip for all. Meet at the parking lot.

September 20 - 10:00 A.M. Making An Insect Collection - a Workshop for Junior Members in Grades 3, 4, and 5. Children will collect and mount insects. Registration required. Limit 10 children.

September 24 - 6:15 P.M. Connecticut College Arboretum. Our final evening field trip of the year will be to see the woods as fall begins. Meet at the main entrance of the Arboretum.

September 27 - 8:00 A.M. Griswold Point, Lyme. A walk down a sand spit which ends at the mouth of the Connecticut River. Marshes, mudflats, and sandy beaches make this a pleasant trip. Meet at the parking lot of the White Sands Beach in Lyme.

NATURALIST NOTEBOOK

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ROBERT C. DEWIRE--Naturalist
MICHAEL WALKER--Curator

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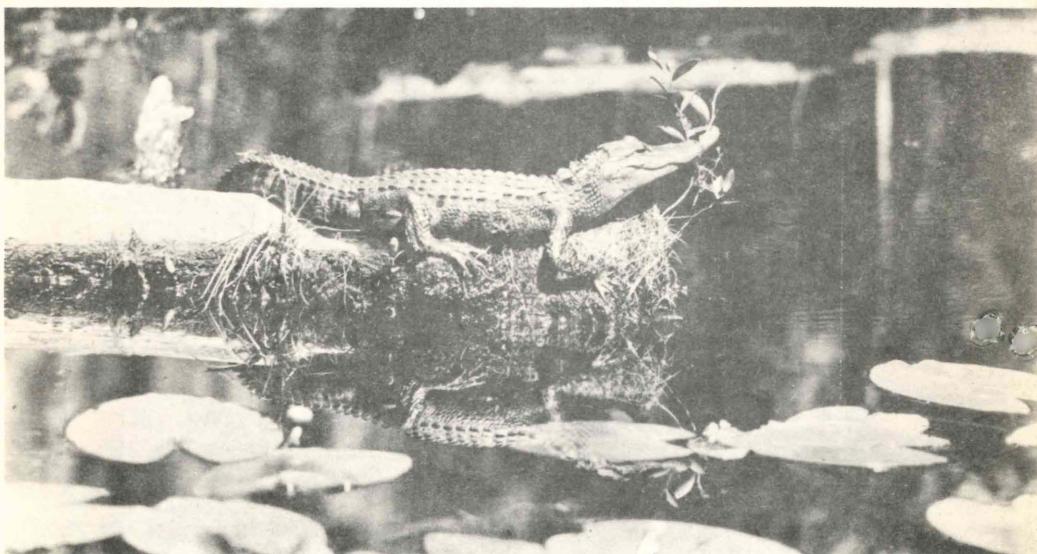
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The American Alligator will be one of the stars you will see in William Anderson's superb Audubon Wildlife Film "Our Unique Water Wilderness--The Everglades". Season Tickets will go on sale Sept. 15th.

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